

Project Information

Project Name: **US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)**
 Sponsor: **Transportation Authority of Marin** TIP ID: **MRN050034** RTP ID: **230701**
 Agency: **Transportation Authority of Marin** Mode: **STATE HIGHWAY** Sub Mode:
 Project Type: **WIDENING** Trans. System: **STATE HWY** Purpose: **EXPANSION** County: **Marin**
 Proj. Desc.: **Marin and Sonoma Counties: From SR 37 in Novato to Old Redwood Highway in Petaluma; Convert expressway to freeway and widen to 6 lanes for HOV lanes.**
 RTP Tittle: **Widen U.S. 101 (adding an HOV lane in each direction) from Route 37 to Marin/Sonoma County line (Marin County portion) and from Marin/Sonoma County line to Old Redwood Highway in Petaluma**

Step 1: Project Identification

1: Does this project have any federal funding?	Yes
2: Does this project (or any phases of the project) require any federal action (such as federal authorization or approval for funding or environmental review) after December 14, 2010?	No
3: Is the project exempt from both regional and project-level air quality conformity under 40 CFR 93.126? Project Type Selected: None Applies	No
4: Is the project exempt from regional air quality conformity under 40 CFR 93.127? Project Type Selected: None Applies	No
5: Is the project exempt from regional air quality conformity under 40 CFR 93.128? Project Type Selected: None Applies	No
6: Does this project meet the definition of a "project of air quality concern" under 40 CFR 93.123(b)(1)? Project Type Selected: None Applies	No

Dates for Interagency Consultation

Requested Date of Interagency Consultation:
 Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:
 Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:

Dates for PM2.5 Hot-Spot Analysis

Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:
 Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:

Project Information

Project Name: **US 101 Marin/Sonoma Narrows (Sonoma)**
Sponsor: **Sonoma County Transportation Authority** TIP ID: **SON070004** RTP ID: **230701**
Agency: **Sonoma County Transportation Authority** Mode: **STATE HIGHWAY** Sub Mode:
Project Type: **HOV** Trans. System: **STATE HWY** Purpose: **EXPANSION** County: **Sonoma**
Proj. Desc.: **Marin and Sonoma Counties: From SR37 in Novato to Old Redwood Highway in Petaluma; Convert expressway to freeway and widen to 6 lanes for HOV lanes.**
RTP Title: **Widen U.S. 101 (adding an HOV lane in each direction) from Route 37 to Marin/Sonoma County line (Marin County portion) and from Marin/Sonoma County line to Old Redwood Highway in Petaluma**

Step 1: Project Identification

1: Does this project have any federal funding?	Yes
2: Does this project (or any phases of the project) require any federal action (such as federal authorization or approval for funding or environmental review) after December 14, 2010?	Yes
3: Is the project exempt from both regional and project-level air quality conformity under 40 CFR 93.126? Project Type Selected: None Applies	No
4: Is the project exempt from regional air quality conformity under 40 CFR 93.127? Project Type Selected: None Applies	No
5: Is the project exempt from regional air quality conformity under 40 CFR 93.128? Project Type Selected: None Applies	No
6: Does this project meet the definition of a "project of air quality concern" under 40 CFR 93.123(b)(1)? Project Type Selected: None Applies	No

Dates for Interagency Consultation

Requested Date of Interagency Consultation: **JAN- 2011**
Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:
Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:

Dates for PM2.5 Hot-Spot Analysis

Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:
Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:

PM_{2.5} Project Assessment Form for Interagency Consultation

RTIP ID# 230701 (Transportation 2035 Plan)

TIP ID# MRN050034 & SON070004

Air Quality Conformity Task Force Consideration Date

February, 2011

Project Description

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) propose to improve a 26.0-kilometer (km), or 16.1-mile (mi) segment of US 101, generally from the City of Novato (in Marin County) northward to the City of Petaluma (in Sonoma County) (see Figure 1). The improvements involve, among other upgrades, constructing High Occupancy Vehicle (HOV) lanes, widening and realigning portions of the roadway, construction of new interchanges, upgrading drainage systems, and construction of new frontage roads and bikeways. At the southern end of the project boundary, which starts 0.5 km (0.3 mi) south of the junction of US 101 and State Route (SR) 37 in the City of Novato, US 101 is a six-lane freeway. In the central portion of the project corridor, US 101 narrows to a four-lane expressway with multiple access points from neighboring properties. The roadway then transitions to a four lane freeway. The northern end of the project boundary is 0.5 km (0.3 mi) north of the Corona Road Overcrossing in the City of Petaluma (see Figure 2). The narrowing of the freeway to an expressway, which extends for 13.1 km (8.1 mi) and is locally known as the "Narrows," creates a traffic bottleneck and worsens bottlenecks further north and south of the project boundaries. In addition, the multiple access points in the narrow expressway section result in vehicles are entering and exiting US 101, which further impedes steady traffic flow.

For additional project information in the Environmental Document, go to:

http://www.dot.ca.gov/dist4/msn/msn_feir_s/msn_feir.htm

Project Assessment Form for PM_{2.5} Interagency Consultation

Type of Project: Change to an existing State highway					
County Marin & Sonoma	Narrative Location/Route & Postmiles: KP 30.0/44.5 (PM 18.6/ 27.7) in Marin County, KP 0.0/11.5 (PM 0.0/ 7.1) in Sonoma County Caltrans Projects – EA# 264000				
Lead Agency: Caltrans					
Contact Person Wajahat Nyaz Glenn Kinoshita Allen Baradar		Phone# 510-286-5119 510-286-5677 510-286-5000	Email Wajahat_Nyaz@dot.ca.gov Glenn_Kinoshita@dot.ca.gov Allen_Baradar@dot.ca.gov		
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>					
Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	X PS&E or Construction	Other	
Scheduled Date of Federal Action:					
NEPA Delegation – Project Type <i>(check appropriate box)</i>					
Exempt	Section 6004 – Categorical Exemption	X	Section 6005 – Non-Categorical Exemption		
Current Programming Dates <i>(as appropriate)</i>					
	PE/Environmental	ENG	ROW	CON	
Start	01/02/2001	10/29/2009	10/29/2009	06/30/2011	
End	10/29/2009	06/08/2015	06/08/2015	12/25/2017	

PM_{2.5} Project Assessment Form for Interagency Consultation

Project Purpose and Need (Summary):

Purpose:

US 101 is a crucial link for commuters and commerce, connecting the vital business centers of San Francisco and the East Bay with Marin, Sonoma, and the North Coast. As the only continuous north/south roadway serving Marin and Sonoma counties and their main cities and towns, US 101 serves long-distance interregional travelers, as well as shorter, inter- and intra-city travelers. The narrowing of the freeway to a four-lane expressway in an area known locally as the "Narrows," constricts travel and results in local congestion and delays. The Narrows portion has historically served neighboring property owners. As a result, there are multiple points where vehicles can enter or exit US 101 along this segment that further impedes traffic flow. Projected growth of population, housing, the tourism industry, and goods movement along the US 101 corridor all point to even lengthier delays in the future. The existing facility within the expressway segment does not contain pull-out areas for disabled vehicles or other emergency purposes. In addition, disabled vehicles and traffic subject to changing conditions during peak periods are more difficult for motorists to anticipate due to existing roadway's horizontal curves (turning radii) and vertical curves (rates of incline and decline). In short, existing and future congestion and delays are serious problems facing travelers along US 101. The following sections further explain the existing needs in this stretch of US 101.

Need:

- Reduce congestion along US 101;
- Correct operational deficiencies that nonstandard horizontal and vertical curves and narrow shoulders present, particularly during peak travel demand;
- Improve mobility for motorists who use US 101 for home-to-work trips, goods movement, tourist, and recreational purposes; and
- Correct existing drainage and flood hazards and reduce future drainage problems.

Improvement:

The improvements for Segments A (the Southern Segment) and C (the Northern Segment) (See Figures 4 and Figures 6) are similar and include:

- widening the median to accommodate the HOV lanes;
- widening bridges;
- installing ramp metering;
- installing a concrete median barrier and soundwalls; and
- upgrading drainage.

In Segment B (See Figures 5), the modifications would be more extensive, because they involve converting this stretch of US 101 from an expressway to a freeway. The conversion would require the roadway to be widened and realigned. Because direct, at-grade access to US 101 would be eliminated. Like Segments A and C, Segment B would also be improved with a concrete median barrier and upgraded drainage facilities.

Project Assessment Form for PM_{2.5} Interagency Consultation

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

Land uses within the cities of Novato (Segment A) and Petaluma (Segment C) are primarily residential, commercial, industrial, and open space (Note: Boundaries of the segments shown in Figure 2). In Segment B of the project corridor along both sides of US 101 between the Novato and Petaluma city boundaries, land use is predominantly agricultural. Figure 3 shows existing land uses throughout the US 101 corridor within the MSN Project boundaries.

From the southern project boundary to the US 101/South Novato Boulevard Interchange, existing land use is predominately residential in the valley areas west of US 101 and in pockets along San Pablo Bay east of the freeway. The College of Marin-Indian Valley is located west of the freeway, near Ignacio Boulevard; Stone tree Golf Club is located east of the freeway, south of SR 37. Commercial uses in downtown Novato are concentrated along Grant Avenue, along Redwood Boulevard, in pockets along US 101, and in various small clusters and convenience centers. The Vintage Oaks Shopping Center is located east of the highway and south of the Rowland Boulevard Interchange, in the Novato Redevelopment Project Area. Offices are located along the freeway, in and around downtown Novato, near the Novato Community Hospital, along Novato and South Novato Boulevards, and within the industrial parks. Novato Industrial Park contains the bulk of the City's warehousing, distribution, and manufacturing uses. Several industrial operations remain near the downtown, between the railroad and Redwood Boulevard.

Between the US 101/San Marin Drive—Atherton Avenue Interchange and the US 101/San Antonio Road intersection, land uses are primarily agricultural and open space. Valley Memorial Park and the Marin County Airport / Gness Field are located east of the highway; Rancho Olompali SHP and the Institute of Noetic Sciences are located to the west of the highway. Land in the vicinity of San Antonio Road, at the border of Marin and Sonoma Counties, is currently scarcely populated. There are a few houses on relatively large parcels of land and a few small business establishments.

West of the US 101/Petaluma Boulevard Interchange, land uses include residential and commercial. The Petaluma Golf and Country Club is located west of the highway and south of Petaluma Boulevard. Between SR 116 and the northern project boundaries at Old Redwood Highway, land uses are residential, commercial, and open space west of US 101. Cypress Hill Cemetery is located west of the highway near Petaluma Boulevard. East of US 101, land uses are residential, commercial, industrial, and open space. Petaluma Adobe State Historic Park, Adobe Creek Golf Course, Petaluma Municipal Airport, Rooster Run Golf Club, Petaluma Valley Hospital, and the Santa Rosa Junior College Petaluma Campus are located in this area.

PM_{2.5} Project Assessment Form for Interagency Consultation

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Location	2019 No Build			2019 Build		
	ADT	% Truck	# Truck	ADT	% Truck	# Truck
Hwy 101 @ SR 37 JCT	122,248	4.42	5,403	127,905	4.42	5,653
Hwy 101 @ Rowland Blvd	105,355	4.42	4,657	111,931	4.42	4,947
Hwy 101 @ De Long Ave	84,006	6.37	5,351	89,242	6.37	5,685
Hwy 101 @ Atherton Ave	74,932	6.37	4,773	80,285	6.37	5,114
Hwy 101 @ Petaluma Blvd	66,597	4.71	3,137	75,947	4.71	3,577
Hwy 101 @ SR 116 JCT	75,860	5.00	3,793	85,654	5.00	4,283
Hwy 101 @ Washington St	83,507	5.00	4,175	95,180	5.00	4,759
Hwy 101 @ Old Redwood Hwy	95,341	5.61	5,349	99,965	5.61	5,608

Note: Truck percentages taken from 2009 Annual Average Daily Truck Traffic on the California State Highway System (December 2010). Association of Bay Area Governments land use forecasts show no change in land use for the project area, so truck percentages are predicted to remain constant. Total volumes are based on a regional transportation demand model for Marin and Sonoma counties.

NORTHBOUND	2019 AM				2019 PM			
	No-Build		Build		No-Build		Build	
	LOS	SPD	LOS	SPD	LOS	SPD	LOS	SPD
Rte 37 On to Rowland Off	C	64	B	65	C	65	B	65
Rowland Off to Rowland On	C	65	C	65	C	65	C	65
Rowland On to DeLong Off	C	65	C	65	C	64	C	65
DeLong Off to DeLong On	C	65	B	65	C	65	B	65
DeLong On to Atherton Off	C	65	B	65	C	65	B	65
Atherton Off to Atherton On	B	65	C	65	F	20	C	65
Atherton On to Narrow	F	30	C	64	F	11	D	62
Narrow to Landfill Off	E	52	C	64	E	52	D	62
Landfill Off to Landfill On	E	52	C	64	E	52	D	62
Landfill On to San Antonio Off	E	52	C	64	E	52	D	62
San Antonio Off to San Antonio On	E	52	C	64	E	52	D	62
San Antonio On to Kastania Rd	E	52	C	64	E	52	D	62
Kastania Rd to Petaluma Off	E	52	C	64	E	52	D	62
Petaluma Off to Petaluma On	C	64	C	65	C	65	C	65
Petaluma On to Rte 116 Off	D	63	C	65	C	64	C	64
Rte 116 Off to Rte 116 On	C	65	C	65	C	65	C	65
Rte 116 On to Washington Off	E	55	D	61	D	60	D	59
Washington Off to Washington On	D	61	C	64	C	64	C	64
Washington On to Washington On	E	53	D	63	D	57	D	63
Washington On to Begin HOV	E	53	D	59	D	57	D	57
Begin HOV to Redwood Off	D	57	D	59	D	61	D	57
Redwood Off to Redwood On	C	64	C	64	C	65	C	64
Redwood On to Redwood On	D	61	D	63	C	65	D	62
Redwood On to end Study	E	55	D	57	D	59	E	53

Project Assessment Form for PM_{2.5} Interagency Consultation

SOUTHBOUND	2019 AM				2019 PM			
	No-Build		Build		No-Build		Build	
	LOS	SPD	LOS	SPD	LOS	SPD	LOS	SPD
South of Old Redwood Hwy	E	52	E	52	E	52	E	52
Old Redwood Off to Loop On	C	64	C	64	C	64	D	63
Old Redwood Loop On to Redwood Diagonal On	C	64	C	64	D	63	D	62
Redwood Diagonal On to Washington Off	F	32	D	59	F	50	E	55
Washington Off to Washington On	F	16	C	64	D	62	D	63
Washington On to Rte 116 Off	F	13	C	65	F	34	C	65
Rte 116 Off to Rte 116 On	F	9	C	65	F	19	C	64
Rte 116 On to Petaluma Off	F	12	D	61	F	19	D	61
Petaluma Off to Petaluma On	F	9	D	63	F	14	D	62
Petaluma On to Kastania Rd	E	52	E	54	E	52	D	60
Kastania Rd to San Antonio Off	E	52	E	54	E	52	D	60
San Antonio Off to San Antonio On	D	51	E	54	D	51	D	60
San Antonio On to Landfill Off	E	52	E	54	E	52	D	60
Landfill Off to Landfill On	E	46	E	54	E	47	D	60
Landfill On to Narrow	E	52	E	54	E	52	D	60
Narrow to Atherton Off	B	65	E	54	B	65	D	60
Atherton Off to Atherton On	B	65	C	64	B	65	D	63
Atherton On to Delong Off	C	65	C	65	C	65	C	65
Delong Off to Delong On	B	65	C	65	C	64	C	65
Delong On to Rowland Off	C	65	C	64	C	65	D	63
Rowland Off to Rowland On	C	65	C	64	C	65	C	64
Rowland On to Rte 37 Off	D	62	D	60	D	61	D	59

Intersection	2019 No-Build		2019 Build	
	AM	PM	AM	PM
Atherton Av / US 101 SB Ramps	B	B	C	B
Atherton Av / US 101 NB Ramps	C	D	C	E

PM_{2.5} Project Assessment Form for Interagency Consultation

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Location	2030 No Build			2030 Build		
	ADT	% Truck	# Truck	ADT	% Truck	# Truck
Hwy 101 @ SR 37 JCT	126,500	4.42	5,591	138,008	4.42	6,100
Hwy 101 @ Rowland Blvd	112,031	4.42	4,952	123,475	4.42	5,458
Hwy 101 @ De Long Ave	89,619	6.37	5,709	99,586	6.37	6,344
Hwy 101 @ Atherton Ave	80,268	6.37	5,113	90,243	6.37	5,748
Hwy 101 @ Petaluma Blvd	70,029	4.71	3,298	86,113	4.71	4,056
Hwy 101 @ SR 116 JCT	79,493	5.00	3,975	95,760	5.00	4,788
Hwy 101 @ Washington St	88,111	5.00	4,406	110,511	5.00	5,526
Hwy 101 @ Old Redwood Hwy	104,114	5.61	5,841	113,716	5.61	6,379

Note: Truck percentages taken from 2009 Annual Average Daily Truck Traffic on the California State Highway System (December 2010). Association of Bay Area Governments land use forecasts show no change in land use for the project area, so truck percentages are predicted to remain constant. Total volumes are based on a regional transportation demand model for Marin and Sonoma counties.

NORTHBOUND	2030 AM				2030 PM			
	No-Build		Build		No-Build		Build	
	LOS	SPD	LOS	SPD	LOS	SPD	LOS	SPD
Rte 37 On to Rowland Off	C	64	B	65	C	65	B	65
Rowland Off to Rowland On	C	65	C	65	C	65	C	65
Rowland On to DeLong Off	C	65	C	65	C	64	C	65
DeLong Off to DeLong On	C	65	B	65	F	65	B	65
DeLong On to Atherton Off	C	65	B	65	F	34	C	65
Atherton Off to Atherton On	B	65	C	64	F	12	C	65
Atherton On to Narrow	F	26	C	64	F	10	D	60
Narrow to Landfill Off	E	52	C	64	E	52	D	60
Landfill Off to Landfill On	E	52	C	64	E	52	D	60
Landfill On to San Antonio Off	E	52	C	64	E	52	D	60
San Antonio Off to San Antonio On	E	52	C	64	E	52	D	60
San Antonio On to Kastania Rd	E	52	C	64	E	52	D	60
Kastania Rd to Petaluma Off	E	52	C	64	E	52	D	60
Petaluma Off to Petaluma On	C	64	C	65	C	65	C	64
Petaluma On to Rte 116 Off	D	63	C	65	C	64	D	63
Rte 116 Off to Rte 116 On	C	65	C	65	C	65	C	65
Rte 116 On to Washington Off	F	52	D	61	D	60	D	57
Washington Off to Washington On	F	25	C	64	C	64	C	64
Washington On to Washington On	E	52	D	63	E	56	D	63
Washington On to Begin HOV	E	52	D	57	E	56	E	52
Begin HOV to Redwood Off	D	61	D	57	C	64	E	52
Redwood Off to Redwood On	C	64	C	64	C	65	D	63
Redwood On to Redwood On	D	62	D	60	C	65	D	62
Redwood On to end Study	D	58	E	56	D	62	E	54

Project Assessment Form for PM_{2.5} Interagency Consultation

SOUTHBOUND	2030 AM				2030 PM			
	No-Build		Build		No-Build		Build	
	LOS	SPD	LOS	SPD	LOS	SPD	LOS	SPD
South of Old Redwood Hwy	E	52	E	52	E	52	E	52
Old Redwood Off to Loop On	C	64	C	64	F	47	D	62
Old Redwood Loop On to Redwood Diagonal On	C	64	D	63	F	34	D	61
Redwood Diagonal On to Washington Off	F	40	E	56	F	43	F	53
Washington Off to Washington On	F	25	C	64	F	30	D	63
Washington On to Rte 116 Off	F	13	C	65	F	20	C	65
Rte 116 Off to Rte 116 On	F	11	C	65	F	14	C	64
Rte 116 On to Petaluma Off	F	9	D	61	F	16	D	61
Petaluma Off to Petaluma On	F	11	D	63	F	13	D	63
Petaluma On to Kastania Rd	E	52	E	54	E	52	D	60
Kastania Rd to San Antonio Off	E	52	E	54	E	52	D	60
San Antonio Off to San Antonio On	E	52	E	54	E	52	D	60
San Antonio On to Landfill Off	E	52	E	54	E	52	D	60
Landfill Off to Landfill On	E	52	E	54	E	52	D	60
Landfill On to Narrow	E	52	E	54	E	52	D	60
Narrow to Atherton Off	B	65	E	54	B	65	D	60
Atherton Off to Atherton On	B	65	C	63	B	65	D	63
Atherton On to DeLong Off	C	65	C	65	C	65	C	65
DeLong Off to DeLong On	B	65	C	65	C	65	C	65
DeLong On to Rowland Off	C	65	D	63	D	63	D	63
Rowland Off to Rowland On	C	65	C	64	C	64	C	64
Rowland On to Rte 37 Off	D	62	D	59	D	59	D	59

Intersection	2030 NO-Build		2030 Build	
	AM	PM	AM	PM
Atherton Av / US 101 SB Ramps	B	B	C	B
Atherton Av / US 101 NB Ramps	C	D	D	E

PM_{2.5} Project Assessment Form for Interagency Consultation

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

N/A

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

N/A

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

Project Assessment Form for PM_{2.5} Interagency Consultation

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)

The Marin Sonoma US 101 corridor is the main travel route between cities in the two counties. There are few or no other options for trucks or commuters. The two lanes that are being constructed will be designated high occupancy vehicle lanes but will help reduce congestion for all vehicles. Though heavy duty trucks will benefit from less congestion, the project will not encourage higher percentages of trucks because those traveling long distances have always used US 101 and will continue to use it after completion of the project. Trucks traveling within the two largest cities of Novato and Petaluma will continue to use city streets for the relatively short distances.

PM_{2.5} Project Assessment Form for Interagency Consultation

Comments/Explanation/Details *(please be brief)*

The proposed project is within a nonattainment area for federal PM_{2.5} standards. Therefore, according to 40 CFR Part 93, a hot-spot analysis is required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in Section 93.123(b)(1) as a project of air quality concern (POAQC). The proposed projects are not projects of air quality concern (POAQC) as defined in 40 CFR 93.123(b)(1), because:

(i). The volumes of diesel vehicles on US-101 are low and the proposed project would not cause an increase in diesel vehicles using the facilities. The EPA's March 2006 guidance document "Transportation Guidance for Qualitative Hot-spot Analysis in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas" references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. The second criterion is facilities with either higher than 8 percent, or more than 10,000, of diesel truck traffic volumes.

With respect to traffic volumes along the US 101 widening project, both opening year and horizon year AADT volumes are forecasted to be below the criteria of 125,000.

An exception to this is at the south end segment of the project limits, the connector of Rte 37 and US 101 with 127,905 and 138,008 total AADT's, respectively. However, the total truck percentage for this segment is very low, at 4.42% for both years 2019 and 2030. This works out to total truck volumes of 5,653 for year 2019 and 6,100 for year 2030, well below the EPA criterion of 10,000.

(ii). The volumes of diesel vehicles at all intersections within the project area are low and the proposed project would not cause an increase in diesel vehicles at these intersections. As shown in the above tables, the most congested intersection within the project limits at the Atherton Avenue / US 101 Ramps, are projected to operate at LOS B through D under the No Build Alternative. However, the AADT's are low, with 74,932 for No-Build and 80,285 for Build in the opening year of 2019, the truck percentage are predicted to remain constant at 6.37%, the total truck volumes are 4,773 and 5,114 for No-Build and Build. At the Horizon year of 2030, AADT's are 80,268 and 90,243; total truck volumes are 5,113 and 5,748 for No-Build and Build.

(iii). The project is not a new bus or rail terminal, or diesel vehicle transfer point.

(iv). The project is not an expansion of an existing bus or rail terminal, or diesel vehicle transfer point.

(v). There is currently no implementation plan for PM_{2.5} for this region. The project is not in and does not affect areas that will potentially be identified in the PM_{2.5} implementation plan as sites of violation or possible violation.

According to the Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas, this project is not a project of air quality concern under 40 CFR 93.123(b)(1).

Project Assessment Form for PM_{2.5} Interagency Consultation

Attachments

Figure 1. Vicinity Map

Figure 2. Location Map and Project Segments

Figure 3. Existing Land Use

Figure 4. Project Layout – Segment A

Figure 5. Project Layout – Segment B

Figure 6. Project Layout – Segment C

PM_{2.5} Project Assessment Form for Interagency Consultation

Figure 1. Vicinity Map

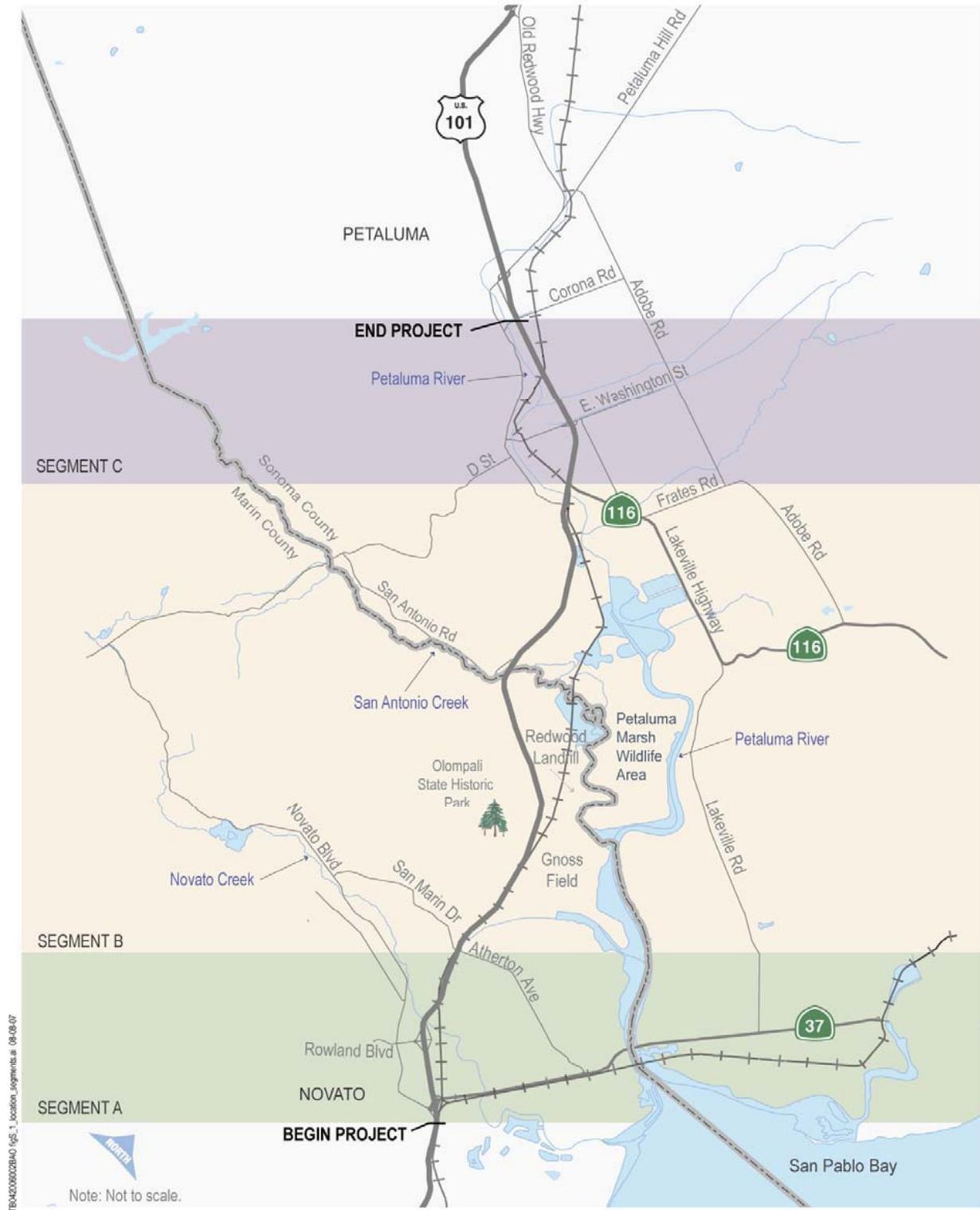


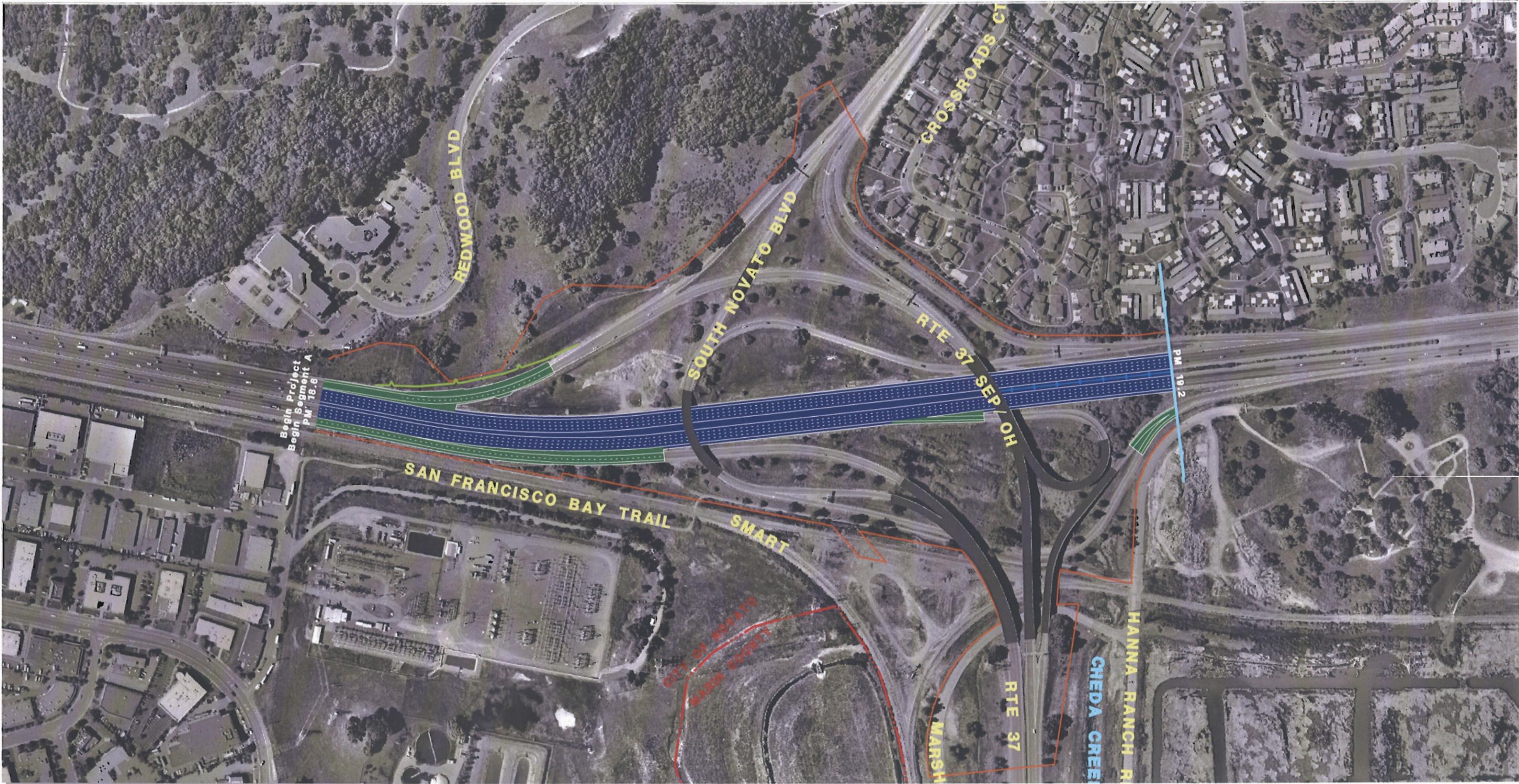
TB04200002B00 Fig. 1.1 vicinity_map.a 08-28-08



Project Assessment Form for PM_{2.5} Interagency Consultation

Figure 2. Location Map and Project Segments





LEGEND

	EXPRESSWAY TO FREEWAY / HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From beginning of Segment A, south of State Route 37 to north of State Route 37

MARIN - SONOMA NARROWS EA 04-264000

(FEIR / S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1"=400'

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
 04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
 DATE 8-1-08



Figure 4. Project Layout - Segment A (Sheet 1 of 5)



- LEGEND**
- EXPRESSWAY TO FREEWAY/ HOV FACILITIES
 - FRONTAGE/ACCESS ROAD
 - CLASS TWO BIKEWAY
 - CLASS ONE BIKEWAY
 - BRIDGE WORK
 - RAMPS
 - TO BE REMOVED
 - EXISTING STATE RIGHT-OF-WAY
 - COUNTY/CITY LIMITS
 - CONCRETE BARRIER
 - IMPROVED EXISTING ROAD
 - CLASS TWO BIKEWAY
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED TEMPORARY
 - CONSTRUCTION EASEMENT
 - RETAINING WALL
 - SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From State Route 37 to south of the Rowland overcrossing.

MARIN - SONOMA NARROWS EA 04-264000

(FEIR/ S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

04-MRN-101-KP 30.0/ 44.5 (PM 18.6/ 27.7)
 04-SON-101-KP 0.0/ 11.5 (PM 0.0/ 7.1)
 DATE 8-1-08

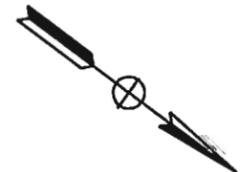
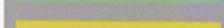
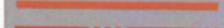
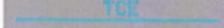
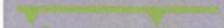


Figure 4. Project Layout - Segment A (Sheet 2 of 5)

REFERENCE COUNTY ASSESSOR'S MAPS AND CALTRANS RIGHT OF WAY COMPLETE RIGHT OF WAY



LEGEND

-  EXPRESSWAY TO FREEWAY / HOV FACILITIES
-  FRONTAGE/ACCESS ROAD
-  CLASS TWO BIKEWAY
-  CLASS ONE BIKEWAY
-  BRIDGE WORK
-  RAMPS
-  TO BE REMOVED
-  EXISTING STATE RIGHT-OF-WAY
-  COUNTY/CITY LIMITS
-  CONCRETE BARRIER
-  IMPROVED EXISTING ROAD
-  CLASS TWO BIKEWAY
- PRW PROPOSED RIGHT-OF-WAY
- TCE PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From Rowland overcrossing to the Franklin Avenue overhead

MARIN - SONOMA NARROWS EA 04-264000

(FEIR/ S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
 04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
 DATE 8-1-08



Figure 4. Project Layout - Segment A (Sheet 3 of 5)



- LEGEND**
- EXPRESSWAY TO FREEWAY / HOV FACILITIES
 - FRONTAGE/ACCESS ROAD
 - CLASS TWO BIKEWAY
 - CLASS ONE BIKEWAY
 - BRIDGE WORK
 - RAMPS
 - TO BE REMOVED
 - EXISTING STATE RIGHT-OF-WAY
 - COUNTY/CITY LIMITS
 - CONCRETE BARRIER
 - IMPROVED EXISTING ROAD
 - CLASS TWO BIKEWAY
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED TEMPORARY CONSTRUCTION EASEMENT
 - RETAINING WALL
 - SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From the De Long overcrossing to the Atherton overcrossing.

MARIN - SONOMA NARROWS EA 04-264000

(FEIR/ S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1"=400'

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
 04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
 DATE 8-1-08

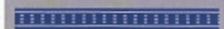
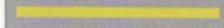
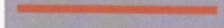
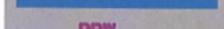
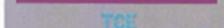


Figure 4. Project Layout - Segment A (Sheet 4 of 5)

REFERENCE COUNTY ASSESSOR'S PARCEL MAPS
AND CALTRANS RIGHT OF WAY RECORDS FOR
COMPLETE RIGHT OF WAY DATA



LEGEND

-  EXPRESSWAY TO FREEWAY / HOV FACILITIES
-  FRONTAGE/ACCESS ROAD
-  CLASS TWO BIKEWAY
-  CLASS ONE BIKEWAY
-  BRIDGE WORK
-  RAMPS
-  TO BE REMOVED
-  EXISTING STATE RIGHT-OF-WAY
-  COUNTY/CITY LIMITS
-  CONCRETE BARRIER
- IMPROVED EXISTING ROAD
- CLASS TWO BIKEWAY
- PRW
- PROPOSED RIGHT-OF-WAY
- TCE
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- RETAINING WALL
- SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From north of the Atherton overcrossing to north of Black John Road, the end of Segment A.

MARIN - SONOMA NARROWS EA 04-264000

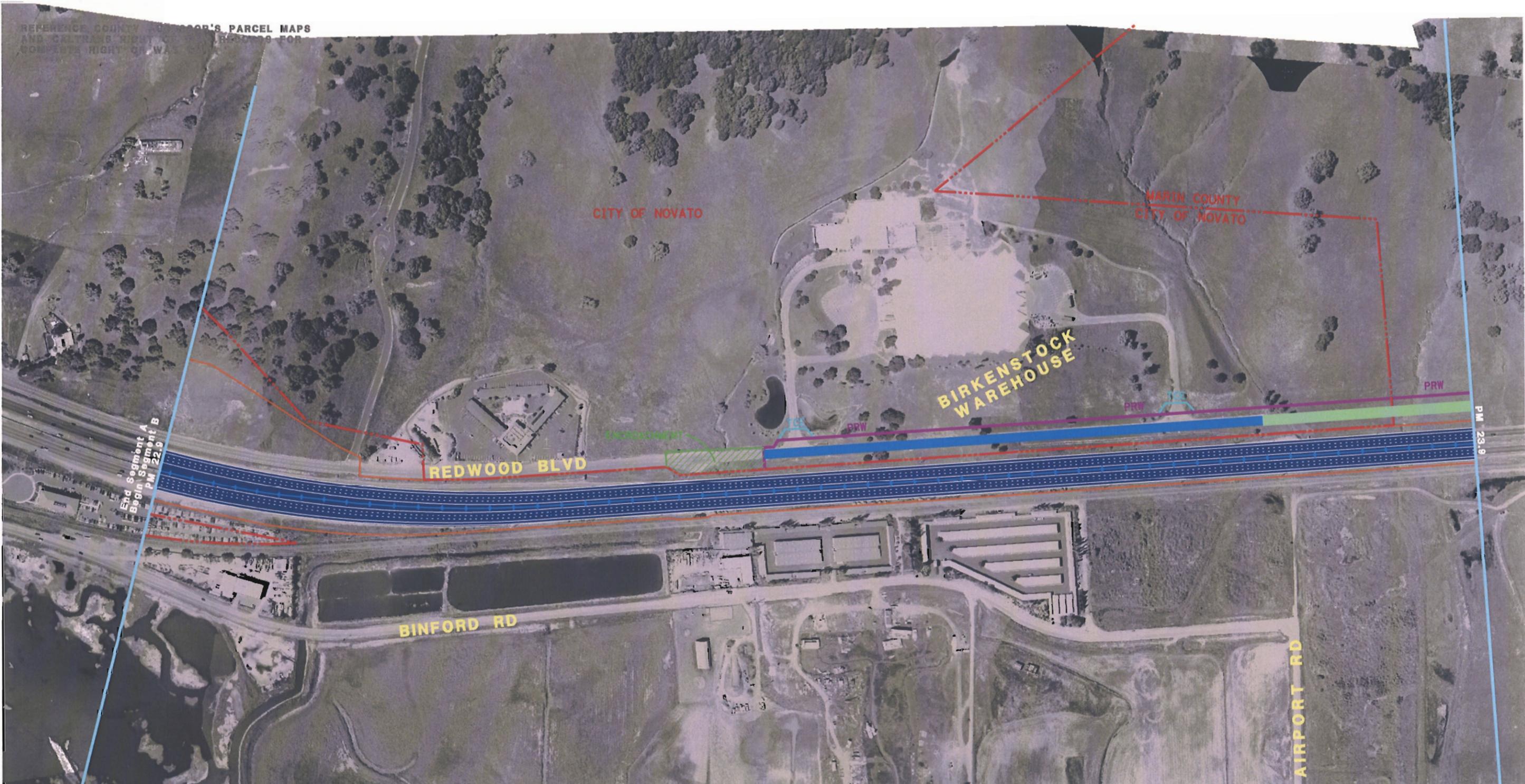
(FEIR/ S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



Figure 4. Project Layout - Segment A
(Sheet 5 of 5)



LEGEND

	EXPRESSWAY TO FREEWAY / HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERRED ALTERNATIVE)

From the beginning of Segment B north
of Black John Road, past the Birkenstock warehouse.

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR / S)**

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



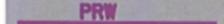
PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 1 of 9)

REFERENCE COUNTY ASSESSOR'S PARCEL MAPS
AND CALTRANS RIGHT OF WAY RECORDS FOR
COMPLETE RIGHT OF WAY DATA



LEGEND

-  EXPRESSWAY TO FREEWAY/
HOV FACILITIES
-  FRONTAGE/ACCESS ROAD
-  CLASS TWO BIKEWAY
-  CLASS ONE BIKEWAY
-  BRIDGE WORK
-  RAMPS
-  TO BE REMOVED
-  EXISTING STATE RIGHT-OF-WAY
-  COUNTY/CITY LIMITS
-  CONCRETE BARRIER
-  IMPROVED EXISTING ROAD
-  CLASS TWO BIKEWAY
-  PROPOSED RIGHT-OF-WAY
-  PROPOSED TEMPORARY
CONSTRUCTION EASEMENT
-  RETAINING WALL
-  SLOPE WALL

**FIXED HOV LANE ALTERNATIVE
(PREFERRED ALTERNATIVE)**

From north of the Birkenstock warehouse, to north of the Olompali State park entrance.

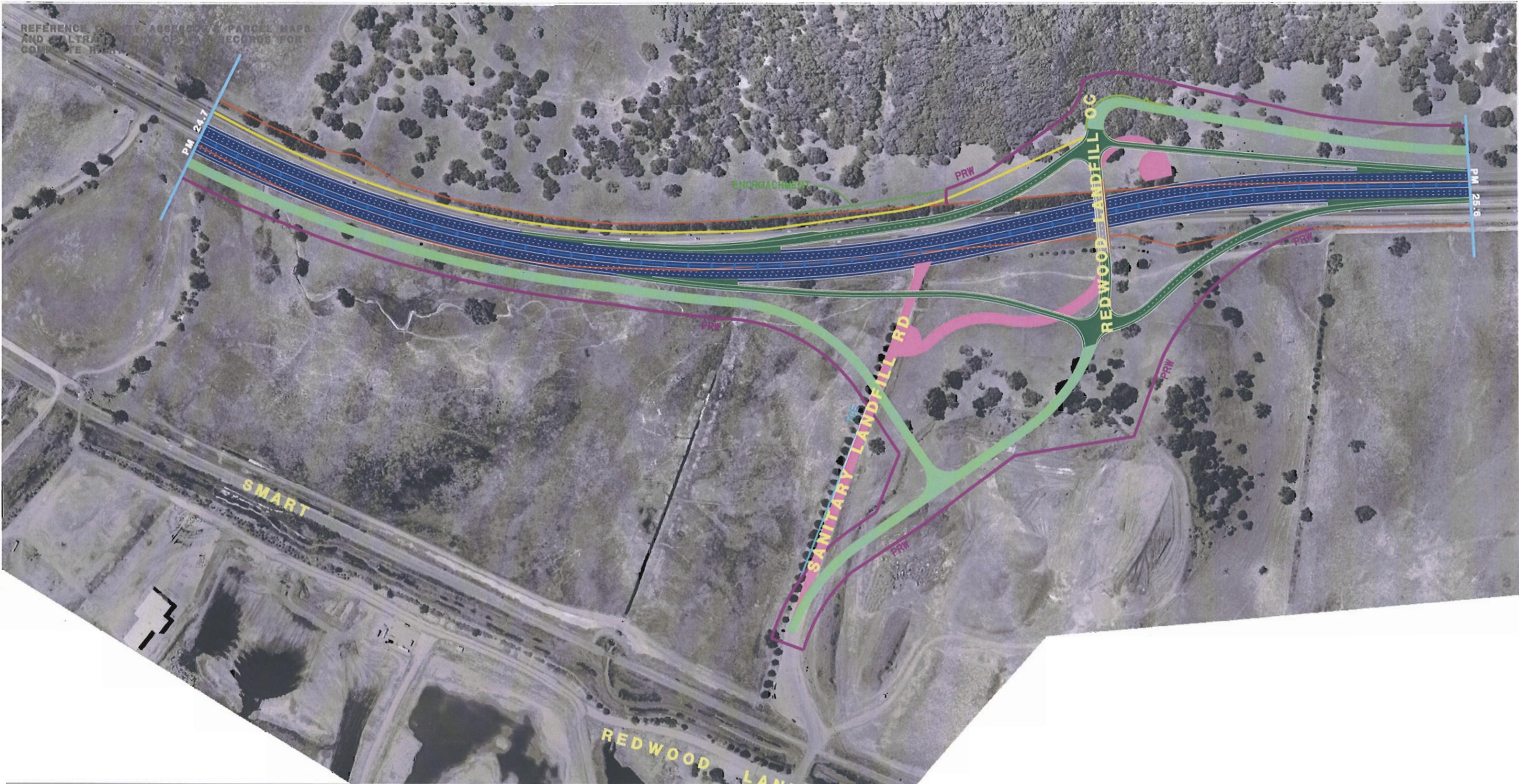
**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



Figure 5. Project Layout - Segment B
(Sheet 2 of 9)



LEGEND

	EXPRESSWAY TO FREEWAY / HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERRED ALTERNATIVE)

From north of Olompali State Park entrance, to north of the Sanitary Landfill.
Showing the proposed interchange at Sanitary Landfill road.

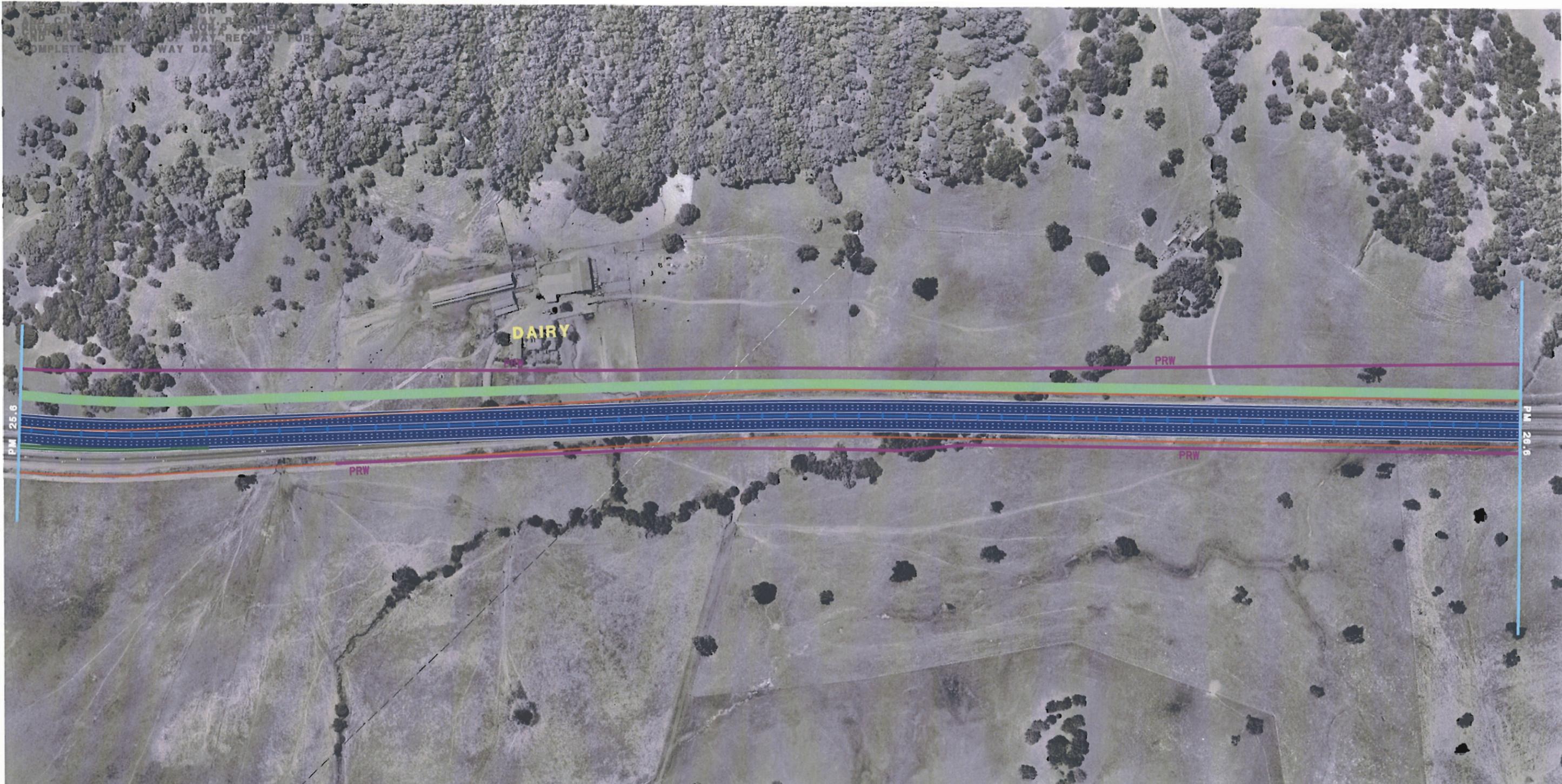
**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1/4000

04-MRN-101-KP 30.0/ 44.5 (PM 18.6/ 27.7)
04-SON-101-KP 0.0/ 11.5 (PM 0.0/ 7.1)
DATE 8-1-08



Figure 5. Project Layout - Segment B
(Sheet 3 of 9)



LEGEND

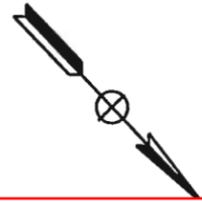
	EXPRESSWAY TO FREEWAY/ HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERED ALTERNATIVE)

From north of the Sanitary Landfill, to north of the Silveira Dairy.
Showing the proposed interchange at San Antonio Road.

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 4 of 9)



LEGEND

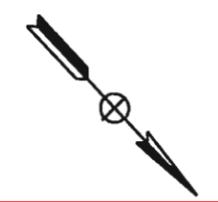
	EXPRESSWAY TO FREEWAY/ HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERED ALTERNATIVE)

From north of the Silveira Dairy, to the Marin/Sonoma County line.

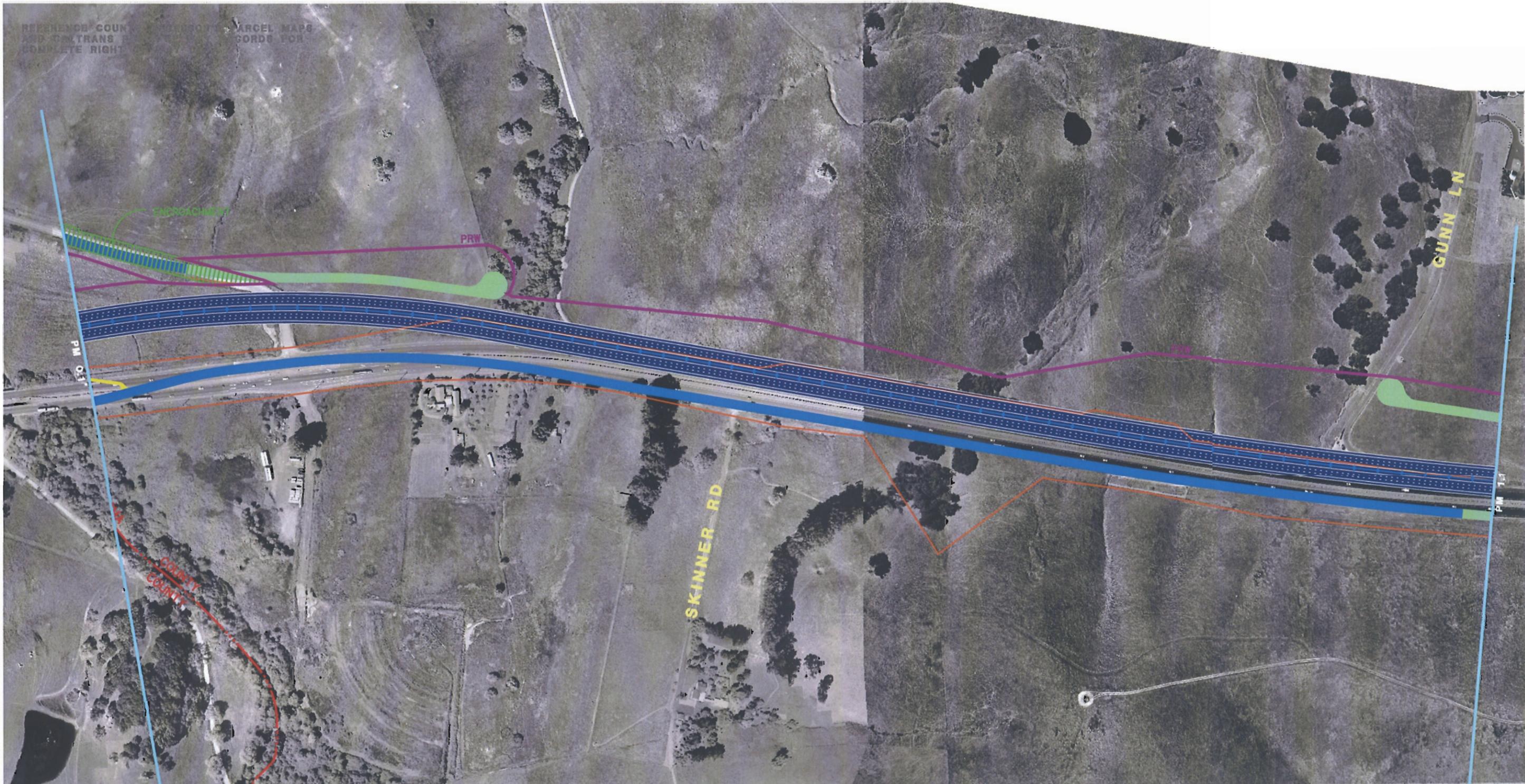
**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-S0N-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 5 of 9)



LEGEND

	EXPRESSWAY TO FREEWAY / HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERED ALTERNATIVE)

From the Marin/Sonoma county line to north of Gunn Ln

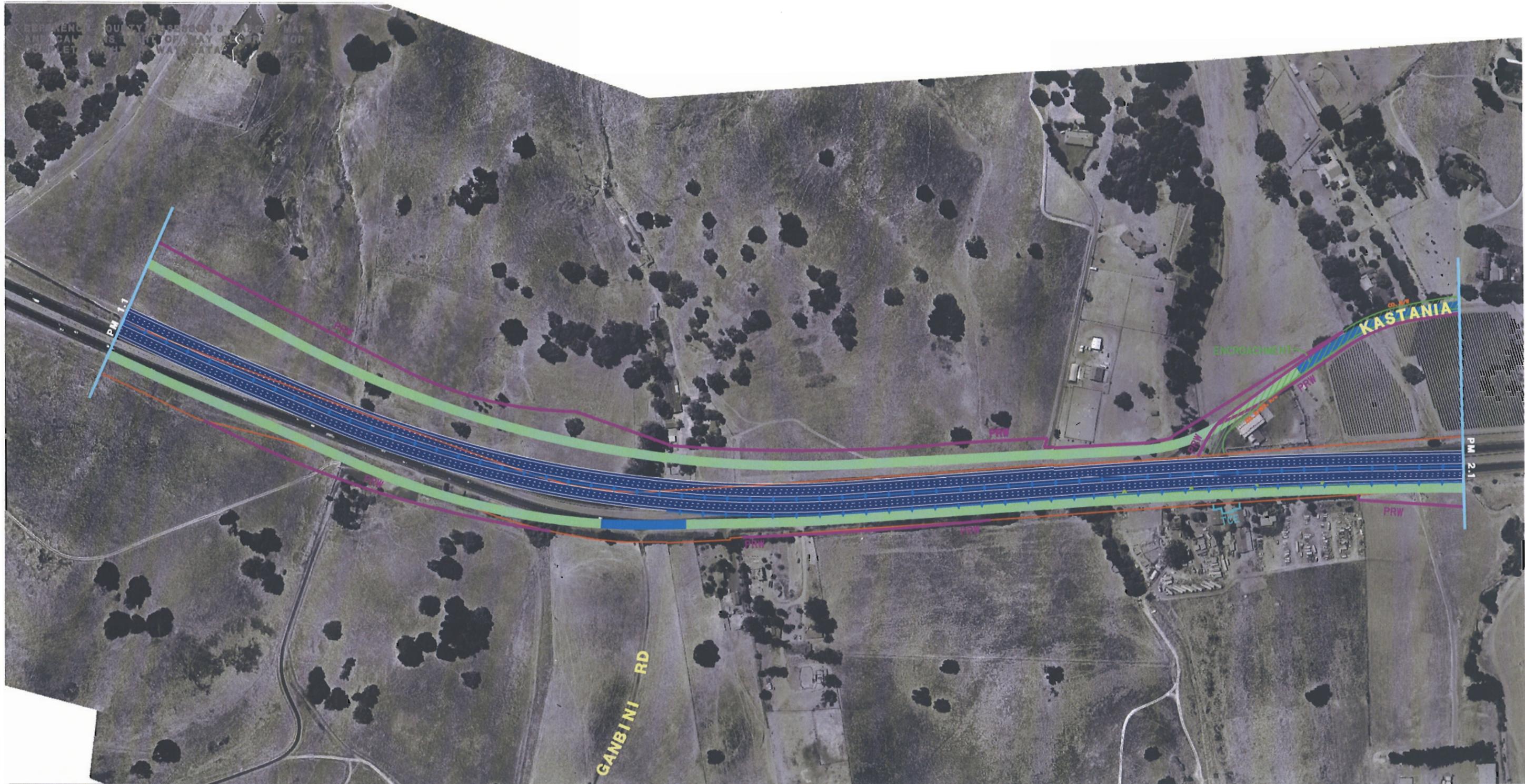
**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 6 of 9)



LEGEND

	EXPRESSWAY TO FREEWAY / HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERRED ALTERNATIVE)

From north of Gunn Ln to north of Kastania Rd

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

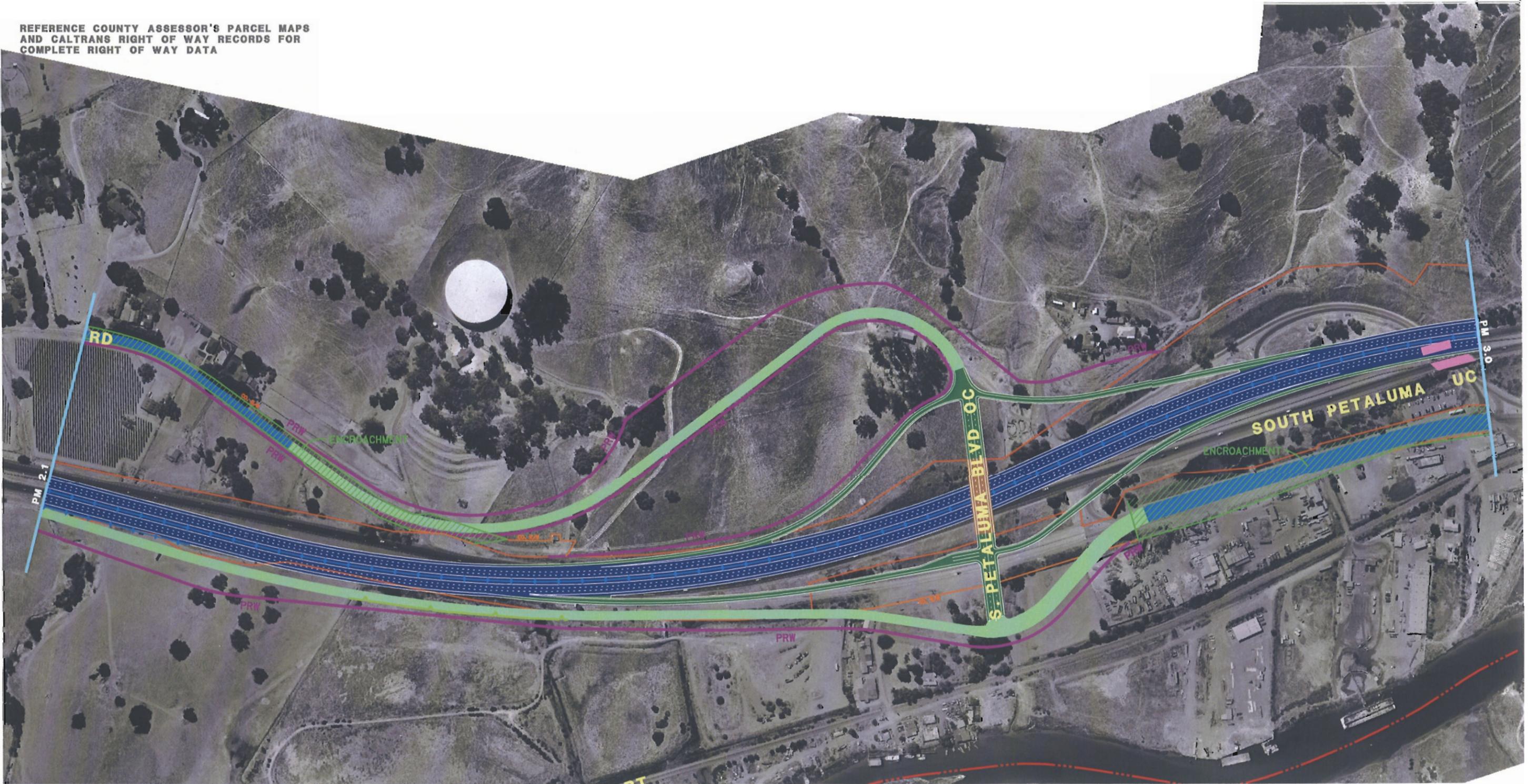
04-MRN-101-KP 30.0/ 44.5 (PM 18.6/ 27.7)
04-SON-101-KP 0.0/ 11.5 (PM 0.0/ 7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 7 of 9)

REFERENCE COUNTY ASSESSOR'S PARCEL MAPS
AND CALTRANS RIGHT OF WAY RECORDS FOR
COMPLETE RIGHT OF WAY DATA



LEGEND

- EXPRESSWAY TO FREEWAY/HOV FACILITIES
- FRONTAGE/ACCESS ROAD
- CLASS TWO BIKEWAY
- CLASS ONE BIKEWAY
- BRIDGE WORK
- RAMPS
- TO BE REMOVED
- EXISTING STATE RIGHT-OF-WAY
- COUNTY/CITY LIMITS
- CONCRETE BARRIER
- IMPROVED EXISTING ROAD CLASS TWO BIKEWAY
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- RETAINING WALL
- SOUNDWALL

**FIXED HOV LANE ALTERNATIVE
(PREFERRED ALTERNATIVE)**

From north of Kastania Rd, to the South Petaluma Blvd interchange.
Showing the new proposed interchange at South Petaluma Blvd.

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

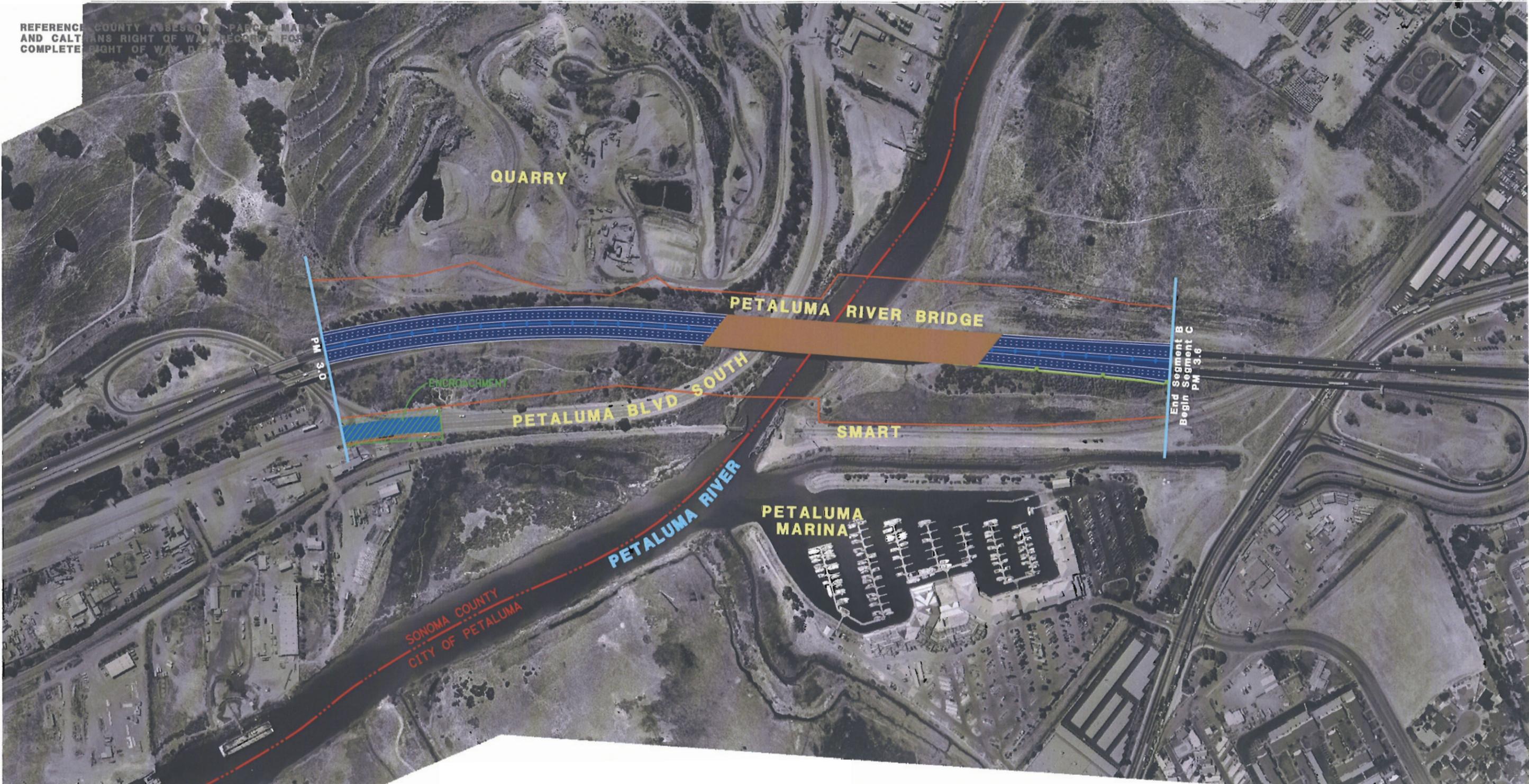
04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 8 of 9)

REFERENCE COUNTY ASSESSOR'S PARCEL MAP AND CALTRANS RIGHT OF WAY RECORDS FOR COMPLETE RIGHT OF WAY DATA



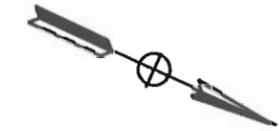
- LEGEND**
- EXPRESSWAY TO FREEWAY/ HOV FACILITIES
 - FRONTAGE/ACCESS ROAD
 - CLASS TWO BIKEWAY
 - CLASS ONE BIKEWAY
 - BRIDGE WORK
 - RAMPS
 - TO BE REMOVED
 - EXISTING STATE RIGHT-OF-WAY
 - COUNTY/CITY LIMITS
 - CONCRETE BARRIER
 - IMPROVED EXISTING ROAD
 - CLASS TWO BIKEWAY
 - PRW
 - PROPOSED RIGHT-OF-WAY
 - TCE
 - PROPOSED TEMPORARY CONSTRUCTION EASEMENT
 - RETAINING WALL
 - SOUNDWALL

FIXED HOV LANE ALTERNATIVE (PREFERRED ALTERNATIVE)

From the South Petaluma Blvd interchange to south of the State Route 116, also the end of Segment B.

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

04-MRN-101-KP 30.0/ 44.5 (PM 18.6/ 27.7)
04-SON-101-KP 0.0/ 11.5 (PM 0.0/ 7.1)
DATE 8-1-08



PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

Figure 5. Project Layout - Segment B
(Sheet 9 of 9)



LEGEND

	EXPRESSWAY TO FREEWAY/ HOV FACILITIES
	FRONTAGE/ACCESS ROAD
	CLASS TWO BIKEWAY
	CLASS ONE BIKEWAY
	BRIDGE WORK
	RAMPS
	TO BE REMOVED
	EXISTING STATE RIGHT-OF-WAY
	COUNTY/CITY LIMITS
	CONCRETE BARRIER
	IMPROVED EXISTING ROAD
	CLASS TWO BIKEWAY
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL
	SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From south of the East Washington interchange to north of Lynch Creek
 Note: Hatching is showing the East Washington interchange project

MARIN - SONOMA NARROWS EA 04-264000 (FEIR/ S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

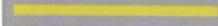
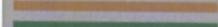
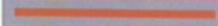
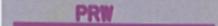
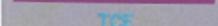
04-MRN-101-KP 30.0/ 44.5 (PM 18.6/ 27.7)
 04-SON-101-KP 0.0/ 11.5 (PM 0.0/ 7.1)
 DATE 8-1-08



Figure 6. Project Layout - Segment C (Sheet 2 of 4)



LEGEND

-  EXPRESSWAY TO FREEWAY / HOV FACILITIES
-  FRONTAGE/ACCESS ROAD
-  CLASS TWO BIKEWAY
-  CLASS ONE BIKEWAY
-  BRIDGE WORK
-  RAMPS
-  TO BE REMOVED
-  EXISTING STATE RIGHT-OF-WAY
-  COUNTY/CITY LIMITS
-  CONCRETE BARRIER
-  IMPROVED EXISTING ROAD
-  CLASS TWO BIKEWAY
-  PRW
-  PROPOSED RIGHT-OF-WAY
-  TCE
-  PROPOSED TEMPORARY CONSTRUCTION EASEMENT
-  RETAINING WALL
-  SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From north of Lynch Creek to the Petaluma Factory Outlet Mall

**MARIN - SONOMA NARROWS EA 04-264000
(FEIR/ S)**

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1"=100'

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
DATE 8-1-08



Figure 6. Project Layout - Segment C
(Sheet 3 of 4)



- LEGEND**
- EXPRESSWAY TO FREEWAY/ HOV FACILITIES
 - FRONTAGE/ACCESS ROAD
 - CLASS TWO BIKEWAY
 - CLASS ONE BIKEWAY
 - BRIDGE WORK
 - RAMPS
 - TO BE REMOVED
 - EXISTING STATE RIGHT-OF-WAY
 - COUNTY/CITY LIMITS
 - CONCRETE BARRIER
 - IMPROVED EXISTING ROAD
 - CLASS TWO BIKEWAY
 - PROPOSED RIGHT-OF-WAY
 - PRW
 - TCE
 - PROPOSED TEMPORARY CONSTRUCTION EASEMENT
 - RETAINING WALL
 - SOUNDWALL

FIXED HOV LANE ALTERNATIVE

From north of the Petaluma Factory Outlet Mall to north of Corona Rd

MARIN - SONOMA NARROWS EA 04-284000 (FEIR/S)

PRELIMINARY STUDY - SUBJECT TO REVISION SCALE 1:4000

04-MRN-101-KP 30.0/44.5 (PM 18.6/27.7)
 04-SON-101-KP 0.0/11.5 (PM 0.0/7.1)
 DATE 8-1-08



Figure 6. Project Layout - Segment C (Sheet 4 of 4)